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THE GENESEE FARMER.

SATURDAY, NOV. 1, 1834.

Root Crops.

We publish the following letter with pleasure. From what we have heard from those who have seen Mr. MOXON's field, we are induced to believe that a view of it would do away much of the prejudice which still exists with many of our farmers against cultivating turneps. Mr. M. will much oblige us and many of our readers, by furnishing us with a detailed account of the means by which he has been so successful in this branch of husbandry.

MR. LUTHER TUCKER—Symptoms of an increasing interest in the cultivation of Root Crops, having been at various times manifested by subscribers to the Genesee Farmer, and having this year succeeded in raising a good crop of White Norfolk and Ruta Baga or Swedish Turnep, and Mangel Wurzel, I take this mode of making my success public, with the wish that such of my brother Farmers as are inclined to try the experiment may favor me with a visit before I begin to draw the Turneps (which will probably be in a fortnight.) I shall feel a pleasure in giving them a true account of my *failures* as well as my success, and as the field exceeds five acres, sown at different times, they will have a good opportunity of forming a judgment on every point, and I need scarcely observe that seeing what has been done is better than reading of it.

Before the season for sowing turneps comes round again, I may, if desirable, enter into the detail of this crop, although I believe there is little to be added to what has already been written in the Farmer by a gentleman deservedly high in the estimation of all its readers, JUDGE BUEL.

As a further inducement I would observe that Mr. Giles H. Holden of this place has an excellent crop of Mangel Wurzel and Carrots.

Respectfully, JOHN MOXON.

Charlotte, Mouth of Gen. River, Oct. 28, 1834.

The sulphuric acid, by its stronger affinity for the lime, takes it from the muriatic acid, unites with it, and forms *sulphate of lime* (or gypsum.) The solidity is owing to the *insolubility* of this last substance in water.—*Comstock's Chem.*

MR. TUCKER—It has been disputed in the Genesee Farmer, whether sulphate of lime be soluble in water. Mr. Comstock thinks it is not; but most Chemists agree that 600 parts of water dissolve one of gypsum, though I do not wish to decide when doctors disagree, yet I am inclined to believe it is partially soluble when in a state of minute division. R. M. W.

Potter, Oct. 21, 1834.

For the Genesee Farmer.

Rainy Days.

How much time is thrown away by some farmers when the weather will not permit them to work out doors. And how well this time might be improved! There are many days and hours of wet weather in a year in which it is impossible to do any work on the farm, and when these are lost, as they are to many farmers of my acquaintance, they amount to a considerable sum. "Time is money," as my grandfather used to say; and further, "Take care of the pence and the pounds will take care of themselves."

Now if this is good advice in money matters, it will surely apply to economy in time, to those hours and half days when the rain drives us under cover.

Well, how are those hours to be best improved. I will tell you, my brother farmer. Get yourself a sett of *carpenter's tools*, and make a work bench, and if you can plane a board and drive a nail, you will find enough to occupy all your spare time.

The tools will cost but five or six dollars—such as are most necessary, and then you will be able to keep your out-buildings, fences and many of your farming implements in good repair. If your barn or stable door breaks down, mend it immediately the first rainy day. If a board is loose, put a nail in it, or replace it. If you want any plain useful kitchen furniture, such as pine tables, benches, &c., take those occasions. But it is unnecessary to multiply the things that might be made or repaired in such times. Every farmer that looks around him (if he is not in the habit of so doing) will find the wood work on his place lamentably out of repair.

Besides, every farmer should accustom himself to the use of tools. When he wants a small job done, it wastes as much time often as it is worth to go several miles after a carpenter. I know some farmers who have not a hatchet, drawing knife, auger, plane or work bench about their place. The consequence is, their jobs and repairs generally go undone, and they have nothing to do half their time in rainy weather. Is this economy? Yet such men will carry their grain five miles further to a market where they can get two cents more on a bushel.

Milo, Oct. 1834. POOR RICHARD.

For the Genesee Farmer.

Inquiries.

I should be glad to know how the "pise" walls, referred to by Gen. Harrison, (Gen. Far. vol. 4, page 309,) are constructed.

It would I think be interesting to the readers of the Farmer to hear what success has attended the feeding of silk worms the past season; and whether D. BRADLEY, or any others, have thought proper to adopt any new course, either with respect to planting the trees, or the care of the worms. Those who are beginning, wish to profit as much by the experience of others as possible. S. R.

[We have delayed the publication of the above, for a week or two, in the hope that we might be able to accompany its publication with an answer to the inquiry in relation to "pise walls;" but we have been unable to find a work containing the requisite information. Will Gen. Harrison favor us with a copy of his Address in which the description was given?]

The Science of Agriculture and Book Farming.

The following remarks on this subject, are from an early volume of the N. E. Farmer. Though written some years since, they are equally applicable to the present time.

Agriculture the oldest of the arts, considered as a science, is still in its infancy. It is, we believe, not fifty years since chemistry was brought to the aid of agriculture, and this will evidently prove one of its principal pillars. Systematic Rotations of crops—Improvements in breeding cattle—the use of Plaster of Paris—Soiling of Cattle—the extensive Field Culture of Roots, for the purpose of feeding cattle—Artificial Grasses, &c. &c. are of modern date, and have brought about great revolutions in the theory and practice of farming. The practical farmer, especially in the older and more populous parts of the country, must understand, and in some degree practice these improvements, or he will not only neglect to make the most of his means, but probably make so many backward and down-hill movements in the journey of life, that, ten chances to one, old age will find him in the vale of poverty. The cultivator who does not keep pace with his neighbors as regards agricultural improvement and information, will soon find himself the poorer in consequence of the prosperity that surrounds him. He will be like a stinted oak in the forest, *which is deprived of light and air by his more* towering neighbors. For instance, A finds out a mode of managing by which he can raise 300 bushels of potatoes with as little expense as B can raise 200 bushels of the same root. A can not only undersell B, and thus injure him as an individual rival, but after awhile Messrs. C, D, E, F, and so on to the end of the alphabet, adopt A's mode of culture; the market price of potatoes is reduced, B can no longer afford to raise them for what they will fetch—his occupation is gone, and it is to be feared that he must go with it, either to a poorhouse or the state of Ohio.

But we would not advise farmers in middling circumstances to make expensive experiments, nor adopt any novelty in husbandry on slight grounds, without being well convinced by testimony, observation or experience, of its beneficial effects. We had better by half follow the beaten track of our ancestors, if it be a little rugged and circuitous, than strike out at once into a wilderness of whimwhams, and theories not sanctioned by actual and repeated experiments. A farmer, unless he be very rich indeed, cannot afford to be "*full of notions*," but must leave merchandize of that sort to the good citizens of the Metropolis. He should exercise his own good sense on every proposed improvement, and neither consider that it *must* be useful because it is new, and has the sanction of some great names, not let its novelty be an insuperable objection to its adoption. Many plants, animals, and theories relating to agricul-

ture, &c. which some years since were considered as very useful and meritorious, are now deservedly sunk in public estimation; and those who adopted or introduced them have suffered in consequence of their anticipations not having been realized.

Some farmers tell us that they never knew any good result from what they called *book-farming*. That *gentlemen farmers*, who know nothing about farming but what they get out of their libraries, spend a great deal, but never make any profit by their agricultural projects, and schemes of domestic economy. We will examine these positions a little.

It was truly said by Lord Bacon, that "*Knowledge is power.*" This maxim applies with as much force to agriculture as to any thing which can be the object of human agency. If we *knew* nothing we could effect nothing beneficial to ourselves or others, but must burrow in the ground and subsist upon beech nuts, and other spontaneous productions of the earth. This knowledge, which gives man his supremacy "over the beasts of the field and the fowls of the air," and which bestows on individuals among mankind a preeminence much more substantial and less invidious than birth, wealth, titles or popular applause, can be acquired only by three modes, viz. *observation, conversation* and *reading*. Observation and conversation are very important inlets to ideas, and reading furnishes perhaps, as great a quantity of useful materials for the mind to operate upon as either of them. *Book knowledge then is power*, and other things being equal, the farmer who obtains information from books, or other printed works, and has strength of mind, and good sense sufficient to make a proper use of it, has the advantage over his unlettered neighbor, who despises book-farming, equal perhaps to one pair of hands and two yoke of oxen. Besides, what is this book knowledge, which some honest cultivators think is so much to be dreaded? It is nothing more than the result of observation, or experience, which after having passed through the channel of conversation, is at length reduced to writing, sent to the press, and the moment it is printed, becomes, according to the objectors to whom we allude, *book farming*; and therefore is to be considered as something very ruinous to the practical husbandman! Thus we will suppose that A has found out a safe and easy cure for the botts in horses, or an antidote against the Hessian fly, or a method by which he can raise double the usual quantity of Indian corn on an acre; A communicates his discovery or improvement to B, his neighbor, who, although he has a great aversion to book farming, makes use of and derives great advantages from it on the strength of A's oral testimony. But A sends an account of his discoveries and processes to the printer, and it is published in some periodical paper, and perhaps finds its way into some volume written on agricultural subjects. The whole then becomes *book farming*, and not worthy of the attention of real, genuine, practical farmers!

But these absurdities are fast yielding to reason and the lights of science. The time has arrived in Europe, and is fast approaching in America, in which books and the information which they contain, will be considered as necessary to make a man a complete farmer, as a complete physician, lawyer or divine.

Of Manures--their Management

AND APPLICATION.

To the politeness of Judge Buel, of Albany, we are indebted for a work of 168 pages, entitled "A Treatise on Agriculture; comprising a concise history of its origin and progress, the present condition of the art, abroad and at home, and the Theory and Practice of Husbandry, which have arisen out of the present state of Philosophical attainments in Europe." This work was published in 1819, and is reputed as having been written by Gen. John Armstrong, of the county of Dutchess, a gentleman who is both a scientific and practical farmer. The possession of this book we consider a valuable acquisition to our agricultural matter, and from which we design to make copious extracts for the Farmer. We commence this week with the eighth section, which treats of manures—their management and application.

"The principle of fertility, (the result of animal and vegetable decomposition,) is, as we have seen, susceptible of solution, and in this form becomes the aliment of that artificial vegetation, which is the work of man, and which leaves so little on the earth, to compensate for the great deal it takes from it. In a course of years, therefore, there will be an actual loss or subtraction of matter, useful or necessary to the growth of plants, which can only be re-established by manures of vegetable or animal origin. The most approved methods of preserving and applying these, must therefore be among the objects most important to the agriculturist; and that the reader may better understand the reasons of the practice we mean to recommend, we begin the discussion with Kierwan's analysis of stable manures.*

105 lbs of—	Charcoal.	Lime.	Clay.	Sand.	Fixed Salts.	Carburated hyd. car. acid & water.
Cow dung, give	3.75	1.20	0.15	2.4	0. 6	92.80
Horse dung, "	10. 2	1.50	0.50	3.0	0.21	89.77
Sheep dung, "	25. 0	10.28	29. 0	29.0	0.72	68.00

The elementary parts of these manures, as exhibited in this table, sufficiently indicate the mode of *preserving them*. When dropped in the fields and in small parcels, by cattle, they exhibit no signs of fermentation, nor undergo, in that state, any degree of chemical decomposition; but when brought together and frequently wetted and subjected to the action of atmospheric air, they are speedily dissolved and give out much gaseous matter. To prevent the escape of these soluble and volatile parts, two things are necessary: 1st, that the dung be collected in a reservoir, of convenient size, walled and paved with stones; and 2d, that a layer of sand, or earth, be occasionally spread over the surface of the dung. The former will prevent filtration, and the latter retain the gaseous matter, so useful in vegetation, and at the same time augment the quantity of manure. To prevent an excess of moisture, which always retards, and sometimes prevents decomposition altogether, the reservoir should be covered.

The *application* of manures, is a subject of more difficulty, and has given occasion to some disputation. The controverted points are:

1st. Whether short, or long dung, or in other words, whether dung thoroughly rotted, or that which has but began to rot, is most advantageous?

2d. Whether dung used superficially, or ploughed deep into the ground, is most profitable?

3d. Whether extraneous matters admitted into the stercorary, are useful or otherwise?

4th. Whether stable manures are best applied directly or indirectly, to wheat crops?

5th. At what time manures are best applied; and,

6. In what quantity?

We shall discuss these points, separately and briefly—and,

1st. Which is to be preferred, long or short dung?

The discordance in practice, as well as in opinion, prevailing on this question, induced some scientific men to institute a series of experiments, having for their object a full and regular solution of it. With this view, parcels of dung (long and short) were taken from the same stables, on the same day, and applied to crops of the same kind, growing on the same fields. The result was perfectly conformed to theory, and similar in all the experiments. Those parts of the field, to which the short dung was applied, gave the best crops the *first* year, but those on which the long dung had been laid, gave the best crops the *second* and *third* years; a fact, which authorizes the conclusion, that if we wish to obtain *one* great crop, the rotted dung is best; but when we look to more permanent improvement, the long dung is to be preferred.

2d. Which is the better practice, to spread manure on the suface, or lay it deeply under the ground?

In favor of the former practice, it has been contended, that the distribution of the dung could more equally be made on the surface, with a spade, than under ground, with a plough;* and for the latter, that all tap rooted plants, entering far into the earth, required it to be laid deep, and that those of fibrous roots, would be sufficiently benefitted by its exhalations. Both modes, however, are obviously bad. We have seen, in the preceding article, that dung, to become the aliment of plants, must undergo a decomposition, and that to the production of this, the *combined* action of *air* and *water* is indispensible. But if the manure be buried deeply, this action cannot reach it, and the dung remains a caput mortuum. On the other hand, if spread superficially, the rains dissolve and carry away many of its juices, while the sun and wind evaporate the rest. These considerations lead to the true rule, on this head, which is, *to lay it three or four inches below the surface of the soil.* At this depth, (if short dung) its action will be most vigorous in all directions, and if long dung, a greater depth will, as already suggested, completely destroy all action.

3d. Are extraneous matters, as horns, hoofs, bones, shells, feathers, leaves, weeds, &c. &c. to be admitted into the dung heap?

There is, perhaps, nothing in either theory or practice, so obviously right that may not be disputed. The objection made to these matters, in mass, is, that they do not decompose equally, and that those ingredients of the heap, which are slowest in decomposition, retard others, which, if left to themselves, would, in this process, be more forward. This objection is without weight; for we have seen, that long, or unrotted manure, though its effect be less prompt, is, upon the whole, more favorable to culture, than that which is rotted. The difference of time in decomposition, is, therefore, no evil, and the augmentation of the mass, is a great good; besides that some of these offals are the most powerful manures. Horns and hoofs are compounded of albumen and gelatine; bones, of the phosphate and carbonate of lime and gelatine; shells, of carbonate of lime and animal matter; and feathers and hair of albumen, oil, &c. &c. Applied to the roots, they

* Tull and Du Hamel's doctrine, that frequent ploughings and sowings superseded the necessity of manure, is no longer held by any well instructed agriculturist. The maxim of Oliver de Serris is much better founded. "Lebien labourer, le bien fumer, est tout le secret de l'agriculture." Till well and manure well, is the whole secret of agriculture.

† The English (are said) to have a machine attached to the drill, that goes before and distributes the manure at the necessary depth. In planting potatoes, we make a bed of dung for the plant. Why not apply the same reasoning and the same practice to all seeding of the ground?

forward the growth of fruit trees more than any other species of manure.

4th. Whether stable manures are best applied, directly or indirectly, to *wheat* crops?

The practice, on this head is different in different places. In France, as in all other countries, where fallows are in use, the dung is applied directly to the wheat crop; while in England, where the rotation system is established, it is applied to the summer crop, which immediately precedes that of the wheat.

The objection to the French practice is, that the weeds brought into the field by the manure, start with the grain, and do as much harm as the dung does good. Nor is there any sufficient answer, that I know of, to this objection. The English practice is, therefore, much to be preferred; because, besides the advantage af exchanging a *fallow* for a *summer crop*, it permits you, while that crop is growing, to destroy the weeds that otherwise would have infested your fields.

5th. At what time of the year are manures best applied?

The most approved rule, on this head, is to apply the winter dung wholly to potatoes, flax and corn; that of the spring, to cabbages and beans; and what may be afterwards collected, to turneps; And,

6th. In what quantity ought we to apply them?

The quantum of manure applied to the acre, must necessarily depend on the staple of the soil. If entirely exhausted of vegetable mould, a great deal will not be too much; but there is a possibility of erring, in this respect, even with regard to poor soils. Where an excess of manure exists, the crop (whatever it be) runs into stalk and leaf, and the effect on the flavor of the vegetable is bad; a fact which the experience of all who have tasted the cabbages and turneps raised in the *paudrette* of Paris and London, can abundantly establish. Even meadows (which are least liable to injury in this way) may be too much dunged. What cultivator, of observation, has not seen his cattle turn with disgust from herbage, the most luxuriant in appearance, but growing out of masses of manure? This circumstance suggests the advantage of going over our meadows in the fall and breaking up and distributing such lumps of dung as may be found in them.

The preceding remarks were confined to stable manures. What remains to be said applies to lime, marle, vegetable ashes, ashes of earth, and green crops ploughed into the ground.

It will be remembered, that the action of lime, as a manure, is owing to its *causticity*, or power of dissolving animal or vegetable substances; and to its quality of absorbing carbonic acid from the atmosphere. These properties render it peculiarly useful in composts, or mixtures of dung, peat and earth; a mass of which, disposed in alternate layers, is no doubt the perfection of this branch of husbandry.* It is also applied without any accessary, and with great advantage, to marshy grounds, to those having in them the remains of shell fish,† to natural meadows, and to all soils abounding in vegetable mould. On those of a different character it must be cautiously used as to *quantity*, and indeed, on any soil, an excess of it will completely destroy the fertilizing principle; an effect constantly observed near mortar beds.

The *time* of using it, is liable to less uncertainty. On wheat, it should be sown as soon as the grain shows itself, and on meadows, late in the fall and after the cattle have been turned off.

Marle, being a compound of clay and lime, has the properties of the latter, and produces similar effects, but in a smaller degree. Hence it is, that the quantity of it given to the acre, is much greater than that of lime. The English practice is, to spread it over a field to the depth of three or four inches. This is done late in the fall, to the end that frost and rain may break down and pulverise it.

The properties of *ashes*, whether derived from the combustion of animals, of vegetables, or fossile coal, are nearly the same, and resemble those of lime and marl. They powerfully attract and hold moisture and carbonic acid, and they hasten the decomposition of stable manures, or other vegetable or animal product. Their action is most favorable on wet and cold soils, and as a top dressing to natural meadows and turnep crops.

The practice of *paring* and *burning the surface of the earth*, has been much used, and warmly recommended by the Irish; and in their land of bogs, as in the marshes of Holland, where infertility arises from excess of vegetable matter, it may be useful; but to burn the surfaces of sandy, gravelly, or even of dry clay soils, would be to lose sight of all sound theory.

Soils, in general, may be divided into two kinds, *sand* and *clay*. The defect of the one, is want of cohesion between its parts; that of the other, an excessive, or superabundant cohesion. But vegetable matter is, as we have seen, a remedy for both; and to accumulate this, is the constant endeavor of every enlightened agriculturist. Yet are we advised to destroy this vegetable matter by fire, and to substitute for it a small portion of ashes, as more favorable to vegetation than the soil itself! But in what will these ashes differ from those found in our chimneys, and of which enough may be had? In nothing, excepting that they may possess somewhat more alkaline salt;* a circumstance which, if the sub-soil be not charged with oily and animal matter, will be more injurious than useful.

But, besides the consideration of getting so little, and that little of such equivocal character and use, what do we lose by the process? If we approach these little kilns, we find them emitting a black smoke, which cannot be entirely consumed: Our eyes and noses are assailed by some stimulating and ammoniacal matter, which is fast escaping, and which so far alters the atmospheric air in the neighborhood, as to render it difficult of respiration. Need we add, that *this* is the animal, oily and gaseous matter essential to the vegetable, and highly important to vegetation? It may be, that the ashes obtained may give one or two good crops of turneps; but even the advocates of this practice admit, that "*it ruins the land for an age*; and hence it is that in *England, tenants are restrained from paring and burning, especially towards the close of their leases.*"†

Clay burning is a different operation, and made with different views; not for the production of ashes or salts, which may operate chemically, but merely (by the application of heat) to alter the texture of the soil; to give to it an artificial division and porosity; to render what was cold warm, and what was wet dry; what was compact granular. But a small degree of heat will not produce these effects; for unlike the stems and roots of plants, clay is not itself combustible; and to bring it to the brick state, the heat applied must be long, continued and great: hence it follows that the practice becomes objectionable on the score of *expense*, and the more so, as *burnt clay* has no possible advantage over the much cheaper substances of sand, gravel and pounded lime-stone. The operation of *all* is merely *mechanical*, and exactly in proportion to the quantity used.

Our partiality for *green crops*, ploughed into the ground as manure, has been sufficiently indicated, and it is now only necessary, that we mention the *plants* best calculated for this purpose. At the head of these we place *buckwheat*, as well on account of *cheapness* as *effect*: *cheapness*, because the price of the seed (which is the only additional expense) is below consideration; and *effect*, because this plant, while growing (from its umbrageous form) is a great improver of the soil, both by stifling weeds and preventing evaporation; and when ploughed into the ground, none decomposes more rapidly, nor has any a more powerful effect in keeping the earth loose and open to the action of light, heat, air and moisture, all of which are indispensible to vegetation. "I know no plant, (says Rozier, the great French agriculturist,) that furnishes a better manure, or which is sooner reduced to vegetable mould, than buckwheat. When cultivated with this view, the usual quantity of seed ought to be increased, and the time of sowing hastened, so as to enable you to have two crops of manure the same season, and *before* the sowing of wheat.

The *lupin* (one of the leguminous family) has been long and profitably employed as a manure in Spain, Italy and the southern provinces of France. Columella directs, that "it be sown in September, about the equinox, so that it may attain, before winter, a growth that will enable it to resist *wet* and *frosty* weather, which it particularly dreads." I need not remark, that these directions are not calculated for this climate, and that the seed time for the lupin *here* is the 20th of May. The properties which recommend it as a manure, are nearly the same as those which belong to buckwheat. It is a quick grower, and has many and large and succulent leaves. While growing, it subsists principally upon the air, and when buried, decomposes entirely and rapidly.

The *pea tribe* has the next place in this list; but though not better adapted to the end than buckwheat or lupins, is more capricious than they, and requires a soil of better staple and more preparation. The seed is also more expensive. Of this tribe, the *yellow vetching* (lathyrus pratensis) is the species to be preferred.

Turneps have been cultivated in England with the same view, but the practice has yielded to another and better; (which however is not suited to our climate,) *feeding them off in the winter* and *on the field*.

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* These might be formed in narrow lintals, inclining from the stable.

† There is much of this description of land on the bays and creeks of the Chesapeake.

* De Sausure's experiments prove, that the stems of trees (other things being equal) produce less of this salt than the branches; the branches less than the twigs: and the twigs less than the leaves. M. Perthuys has formed a table of the relative alkaline products of plants and trees. By this table it appears, that the leaves and stems of Indian corn give by the quintal eight pounds thirteen ounces, the oak one pound five ounces, the pine five ounces.

† See Cobbett, part second, p. 168, "Year's residence in the U. S."

The Geometric Spider.

The Geometric, or net-working spider, is well known, as almost every bush and tree in the gardens and hedge rows, often has one or more of their nests stretched out, in a very vertical position, between their adjacent branches. But the method they pursue in building their nests is not we apprehend, quite so familiar to some of our readers.

The chief care of this spider is to form a cable of sufficient strength to bear the net she means to hang upon it; and after throwing out a floating line as above described, when it catches properly, she doubles and redoubles it with additional threads. On trying its strength she is not contented with the test of pulling it with her legs, but drops herself down several feet from various points of it, as we have often seen swinging and bobbing with the whole weight of her body. She proceeds in a similar manner with the rest of the frame-work of her wheel-shaped net; and it may be remarked, that some of the ends of these lines are not simple, but in form of a Y, giving her the additional security of two attachments instead of one.

In constructing the body of the net, the most remarkable circumstance is her using her limbs as a measure, to regulate the distances of her *radii*, or wheel-spokes, and the circular meshes interwoven into them. These are consequently always proportional to the size of the spider. She often takes up her station in the center, but not always, though it is so said by inaccurate writers; for she as frequently lurks in a little chamber constructed under a leaf or other shelter at the corner of her web, ready to dar down upon whatever prey may be entangled in her net. The center of the net is said also to be composed of more viscid materials than its suspensory lines—a circumstance alledged to be proved by the former appearing under the microscope studded with globules of gum. We have not been able to verify this distinction, having seen the suspensory lines as often studded in this manner as those in the center.

From the New England Farmer.

Remarks on Ploughing.

Although we have in the first volume of this work, pages 60, 278, 393, treated on this subject, some further observations on the most important operation of agriculture may, perhaps, prove beneficial to practical farmers, by furnishing hints, and suggesting ideas which may lead to a train of investigation terminating in results of importance.

In all stiff, heavy and adhesive soils, that are much disposed to moisture, it should be a common rule not to plough them while wet in any considerable degree, especially if there is much clay in their composition. When such land is ploughed wet, the particles of which it is composed are apt to cake, or run together into hard lumps, which require much trouble and labor to reduce to a fine state. Besides, much injury is produced by the treading of the team, and greater power is necessary in performing the operation. But, on the other hand, such soils are ploughed with much difficulty, when very dry; unless before the ploughing they were in a state of tillage, and not baked or bound down very hard. To break up grass ground composed of a strong loam, or a soil in which there is clay in any considerable quantity when in a dry state, is next to impossible. You might almost as well attempt to plough up a brick pavement, or slate rock. Green sward in general, can hardly be ploughed too wet, if it be not miry. Marshy, moory, and peaty or mossy descriptions of soil, should in general, when already reduced to a state of tillage, be ploughed when the season is dry.

In dry, sandy, and perhaps, in some of the more mellow kinds of loamy soils, the business of ploughing may be performed when the earth is in a state of considerable moisture. But very dry sandy land, whenever the weather is hot and dry, should merely be stirred in such a way as may be necessary to prevent the growth of weeds; otherwise the great exhalation of moisture in such seasons may render them too dry for the vigorous vegetation of the seeds or plants, which may be sown or growing upon them. The cultivators of this kind of soil have, therefore, many advantages over others who are engaged in the more stiff and heavy sorts of land, in being able to perform the various operations of arable husbandry with much less strength and expense of team, and by being much less interrupted by the wetness of the seasons. Stiff clayey soils, which are already under the plough, may be beneficially ploughed in dry weather, and it is said that stirring such soils in a dry season, causes them to imbibe moisture, but in sandy soils the opposite result is produced by the same means.

It is very fashionable, and as a general rule, very correct to recommend deep ploughing. But this rule has a great many exceptions, and the cultivator, who should be governed by it without regard to the nature of the soil, and the proposed crops, would only labor hard to injure his land, and reduce his products. We have already in vol. i. page 60, given "Maxims respecting the proper depth of ploughing," and "Advantages of deep ploughing." It may not be amiss to attend to what some writers have observed respecting the dangers and disadvantages, which attend ploughing deep without regard to the nature of the soil and other circumstances. It is observed in Dickson's Agriculture that "though deep ploughing has been recommended by some modern writers upon particular kinds of land, where the bottom and top were of two opposite qualities, and neither of them perfectly good, that a mixture may sometimes be very beneficial, and the experiment of going below the common depth sometimes answer. But that when the top and bottom of eighteen or twenty inches depth consists of the same soil, it is not believed it is ever worth while to exchange the upper part, which has been enriched for centuries back, for a part less rich, merely because it is more fresh. On retentive soils, where the practice of loosening them to some depth by other implements is omitted, deep ploughing is, however, extremely necessary."

In an "Essay on the best Means of converting Grass Lands into Tillage, by James Roper Head, Esq." published in *Communications to the Board of Agriculture*, vol. iii. page 346, it is observed that "it seems reasonable to prefer light to heavy ploughing, because, all things being equal, it must be preferable to have a small depth of soil to cultivate and improve, and inasmuch as the fibers of grass in general are fed from the upper surface of the earth alone, if they find sufficient pabulum; all that lie underneath their nourishment, and has been with much labor moved by the plough, is like a stock in trade, which requires an extra capital, unproductive of interest.

"I have endeavored by all means to search into the nature of sainfoin, clover, and lucern, and the result of my opinion has been that the long penetrating tap roots of these grasses pierce the earth in search of moisture only; that the tap root is the mere syphon and duct; that the branches of the crown of the plant are fed alone by the upper surface of the soil; and that the luxuriancy of their produce depends not upon the congeniality of the bed or *nidus* [nest] of the tap root itself; but on the congeniality of the soil of the upper surface, which alone feeds and furnishes it vegetation."

An article in "Communications to the Board of Agriculture," vol. iv. page 147, written by John M. Mardo, Esq. contains the following statement. "We have witnessed instances where old pasture lands, composed of a gravelly loam were broken up in the spring for barley by trench ploughing. The old sward was turned into the bottom of the furrow, and a dry subsoil brought to the surface from a considerable depth. The crops failed entirely, and there appeared two very obvious reasons for the failure; first, the subsoil brought to the surface to form the seed bed had long been deprived of the ordinary influence of the atmosphere, and the rains; consequently must have been cold and infertile. Secondly, the dry tenacious sward having been placed half broken under the seed bed, the natural moisture of the ground, as well as that which falls in rain, was speedily and habitually evaporated; unless in a season of uncommon moisture, a crop under such preparation could not prosper."

A writer in the General Report of Scotland, Mr. James Brownhill, says "Old Leas, [Grass-grounds] in my opinion should be ploughed if possible not above 4½ inches deep by 8½ or 9 inches broad. If the old lea be a dry soil, it will plough very well with those dimensions; if it be ploughed deeper it must also be ploughed broader, as the furrows will not ply close to one another unless you have breadth in proportion to the depth."

Sir John Sinclair speaks highly of the advantages af deep ploughing in some circumstances and for some crops, but says "it is a general rule never to plough so deep as to penetrate below the soil that was formerly manured and cultivated excepting upon fallow, and then only, when you have plenty of lime or dung to add to, and improve the new soil." The farmers of Flanders which is said to be the best cultivated part of Europe, gradually deepen their soil by ploughing or digging up fresh earth, as their manure increases. Mr. Arthur Young likewise observes that in poor hungry soils some proportion ought to be observed between the depth of a ploughing and the quantity of manure annually spread. The same writer informs us that the depth of ploughing in various towns of England, on an average in sandy soils was four inches; in loamy soils four and three quarters, and in clayey soils three inches and a half. But a note in Sir John Sinclair's "Code of Agriculture" informs that "Mr. Parker of Munden, prefers nine inches for the depth of ploughing, and he has practiced that system for many years, on good loamy land in Huntingdonshire, as well as in the clays and flints of Hertfordshire. He never lost a crop by it, but has met with unvaried success; and he is clearly of opinion, that the propriety of deep ploughing ought not to be made a question, but received as an admitted truth. The farming gardeners near London, act upon the same system with great success. They plough to the depth of from ten to twelve inches, for cabbages and other crops, with implements made on purpose, and with from six to eight powerful horses. Mr. Marshall has known a succession of shallow ploughing farmers beggared on a stiff land farm; and their successors by deeper tillage, make a farmer's fortune upon it."

We have heretofore, vol. i. page 278, given some remarks on the advantages of Fall Ploughing, and showed wherein it was in general to be preferred to ploughing in the spring. We shall add nothing at this time, to that part of our subject, but hope our agricultural readers will attend to *Horizontal Ploughing*. In page 14, of our first volume we have given an article on the subject of drawing horizontal or perfectly level furrows on hilly lands, and given a cut of the rafter level; or implement introduced into Virginia by Col. Randolph, son in law to Mr. Jefferson.

Whether the rafter level has yet been introduced in this part of the United States, we cannot say although we are informed that it is a very common implement of agriculture in Virginia. Those who do not like to try a new thing, may perhaps, derive some advantage from the following observations on horizontal ploughing copied from *Dean's New England Farmer*.

"Regard should be had to the shape of the land in ploughing. They who plough a steep hill up and down injure their cattle, and miss of ploughing their land to advantage. The furrow that is drawn up hill must be excessively shoal; or the team much stronger than common. For this reason a hill should be ploughed horizontally, with rows and nearly parallel to the base as possible. This may be easily done when all the sides of a hill are to be ploughed at once. The

rains will carry much of the finest of the soil to the bottom of the hill if the furrows are made up and down. But ploughed the other way the furrows will be sufficient drains; and the water will move so slowly in them that none of the soil will be washed away. But when a hill is very steep, no turning of a furrow upwards should be attempted. And if only one side of a steep hill is to be ploughed, the furrows should be all cut the same way, the team returning light after each furrow."

From the Farmer and Gardener.

Improved Breeds of Swine.

We are asked by so many of our subscribers and others, concerning our breeds of swine, and the prospect of being able to supply pigs of the various kinds, that we are induced to adopt this method of answering them.

We have four distinct breeds in our collection, viz. first, the Barnitz breed, a beautiful white hog, which lives on grass only, during the summer, requires little feeding to make it good pork, weighing at 12 months old about 300 pounds.

Second, the Norfolk thin rind breed, imported from England four years ago. They are mostly white, sometimes a little spotted with black. They are a very meaty, small boned breed, remarkably contented and gentle, keep well in pastures or small pens, eat little and grow very fast, skin remarkably thin, and hair short, with large bodies, small heads, and short legs—weighing at 9 months old, 250 to 300 pounds—and at 18 months old, 400 to 460 pounds.

Third, the Mackay breed, produced in Massachusetts by various crossings of imported stock, by Capt. Jonn Mackay. They are white, and remarkable for *beauty*. Their growth and size are equal to those of the "Thin rind," and their general quality may be inferred from the facts, stated in the following letters, and in the article on page 113 of this volume.

Fourth, the celebrated Parkinson or Bedford or large Spotted Woburn hog, the favorite of the Duke of Bedford, which were brought from England to this country by Mr. Parkinson many years ago, as a present to General Washington—the following description of them is extracted from letters addressed to us by Sanford Howard, Esq. of Maine, and by Mr. Holmes, the Editor of the Maine Farmer, from the former of whom we obtained our Mackays, and from the latter our Bedfords, which, by the way, partake one fourth of the Mackay blood, and are evidently improved by the cross.

"When I removed from Massachusetts, I purchased and brought with me two pairs of swine, being of the two most celebrated breeds in that state. One pair was of the breed called in the Complete Grazier, "Large Spotted Woburn, or Duke of Bedford breed." This breed or one very similar, is now well known in New England, and I presume in your vicinity too, as it is said they were some years since to be seen on the farm of Gen. Ridgely, near Baltimore, by the name of the Bedford breed.

The other pair I purchased of Capt. John Mackay, of Boston. They were of what is now called the Mackay breed.

The competition for the premiums on swine at the Brighton and Concord shows, has been of late years chiefly between these two breeds. Capt. Mackay himself has taken over $200 at these shows, within the last six years.

The characteristics of the Bedford, or Woburn breed are—heads short and small,—backs broad and rather arched,—sides long and deep,—gammons very heavy in proportion to the rest of the carcase,—legs short and small, and constitutions very hardy,—subsist well on grass.

The Bedford sow which I brought with me, I killed last fall, she being three and a half years old. She had produced five litters of pigs, making in number 60, having had the first at a year old. Of this number she raised 45. I fattened her mostly on potatoes some boiled, and some raw. She weighed within a few pounds of 500, and might easily have been made to weigh 100 pounds more. The gammons were cut off square with the hip joint, (some of the pelvis bone being taken,) and they weighed together 64 pounds! Her skin was thin—flesh fine grained, and of excellent flavor.

"The swine sent you, I consider the best or among the best breeds that we have in Maine. They are the large spotted Woburn breed, (called also the Bedford breed,) and the Mackay breed. The latter are generally, if not always white, ears lop some, though not very large, heads not over large—shoulders broad on the top or *withers*, backs also broad, breadth continues out pretty well to the tail, and the rump comes down more straight than usual, making what a sailor would call a *square stern*, barrels good and chine deep. They are good feeders, have a good sized bone but not too large.

The Bedford breed you will find described (as you probably know) in many of the works on agriculture. They are not, I think, quite so well made behind as the Mackay, but if any thing, are a little broader and deeper in the fore parts—with legs of a medium length."

Of all these kinds our stock is young, except that of the Barnitz breed. No pigs can be expected for sale *from any of this stock* till next spring, when we hope to be able to supply the numerous orders on our register for pigs of each of the above breeds.

Disposing Plants in Masses.

The system of disposing plants in masses, so frequently and ably advocated in this Magizine, is becoming very general, and certainly produces a much better effect than the tedious monotony of an indiscriminate mixture. In the practice, however, of this superior method, it should be remembered that the groups and masses ought to be considered as parts of a whole, and, as such, should harmonize and unite with each other, with regard to form and color. Without attention to this point, the several disunited and independent parts will no more form a gardenesque landscape, than the colors arranged on a painter's palette will of themselves form a picture. I have known more than one small garden spoiled by a disregard of proportion, the shrubs and flowers being disposed in groups of far too large a size. In such a situation, a single plant, or a group of two or three, must be considered to bear the same proportion to the whole, as much larger masses or groups bear in the case of a park. Although I approve, as I have said above, of the principle of placing different species in groups and masses, I think that there are cases in which this, like all other principles, may be carried too far. In a small flower-garden which I very much admire, I have seen a group, composed of myrtles and China roses, planted alternately in quincunx order, the larger plants being in the center; and, in my opinion, a better effect was produced than if the two species had been in separate masses: the rich green color of the myrtles' leaves, forming a ground to the beautiful white of the flower; the light and elegant foliage and pendant bloom of the rose; the mingled color, and the associations connected with both, made an impression upon me which I shall not easily forget. In the same garden there is a group consisting of an acacia, a sumach, and a laburnum. The light feathery elegance of the acacia, the broader and more shadowy plumes of the sumach, and the pendulous clusters of flowers of the laburnum, compose a little picture of the most highly finished character.—*Loudon's Mag.*

New Improvement in Washing Machines.

One would suppose that Yankee ingenuity had become well nigh exhausted upon washing machines: but we have lately examined a new invention, or rather a modification of an old system, by Mr. James Pullen, of China. His plan is upon the common fluted washboard, but his flutings are made of sheets of copper, zinc, tin—or they may be made of glass, earthen, or similar durable and smooth substances. These sheets or sub-substances are fastened to boards, and used as such boards are commonly used. Now where's the improvement?—1st, In durability. 2d, In its smoothness. And 3d, Ease in performing the operation of rubbing. A common washboard does not last long—it soon gets rough, of course wears out the clothes and makes harder work; they get warped and split, and then patched up with shingle nails, which get rusty, and make a rickety, weak concern; the women scold, and the poor husband has to march off and buy a new one. The metalic rubber will last a long life time, if a little care be taken in drying it after using; for when worn a little on one side it may be turned and worn on the opposite side, and in the contrary direction.

We like the simplicity of the concern. Our washing machines have been too complicated. The inventors seem to have considered it necessary to show their skill in combining the greatest number of mechanical modifications in one piece; and the greater the array of cogwheels, cranks and rollers, the more ingenious has the machine been considered, and the more likely to do its duty without hands. Disappointment has of course followed. This improvement is simple, and promises no more than it can perform. It does not promise to indulge idleness, and to do away the labor of washing; but to lighten and facilitate that labor, and render it a pleasure, rather than a dreaded task. Mr. Pullen has left one of them at our office for the inspection of those who wish to examine it.—*Maine Farmer.*

Legs of mutton are very good, cured in the same way as ham. Six pounds of salt, eight ounces of salt-peter, and five pints of molasses, will make pickle enough for one hundred weight. Small legs should be kept in pickle twelve or fifteen days; if large, four or five weeks are not too much. They should be hung up a day or two to dry before they are smoked.

Miscellaneous Selections.

German Geese.—Every farmer who has bred the native geese, knows what pestilent animals they are. Almost as light as gulls they are capable of soaring as high; so that fences and walls are mere matters of derision with them. Wandering into mischief, is their delight through life, and when killed, fat indeed must be the bird which weighs seven pounds. All these untoward circumstances, necessarily connected with keeping the old breed of geese, have discouraged many farmers from having any thing to do with these animals; and no wonder, neither. But as every farmer does or should delight to see his yard stocked with as great a variety of fowls as possible, provided the trouble is not too much, we would take the liberty of recommending to notice, Mr. George Sisson's excellent breed of German Geese. This stock was imported by the late Judge Sisson, from Bremen, and has fully answered its very excellent character. The geese are of the purest white--beautiful as swans—weigh when fat from 18 to 22 pounds, flesh of an exquisite color and flavor—feathers abundant and of the first quality. Added to this, and by no means least, they are perfectly quiet in their dispositions. None of the squalling, creeping and flying characteristics, so odious and common in the native breed, attach to these beautiful birds. Mr. Sisson has a large flock at this time, and probably would dispose of stock to those who might wish to introduce this truly valuable and profitable race of fowls into their collection. So much superior are these geese to the ordinary breeds, that we wonder any person can be found willing to continue raising them when such a superior race may be so easily obtained.—*Warren Rhode Island paper.*

Apples.—We have been presented this week with a handsome lot of apples by Hail M. Sisson, Esq. of this town, which grew in his orchard; 16 of which would fill a peck measure, and 68 a bushel. These apples are called the "light house russet," and by some are known by the name of the "cork apple." From the tree on which these grew, (which is not of a large size) 18 bushels of good sound apples have been taken this fall.

The same gentleman informs us that from 14 trees in his orchard, he has recently picked 200 bushels of good Winter Apples. If any of our farmers can beat this, let them come on.--*Warren Rhode Island Star.*

Flying.--Of all the attempts of human philosophy, that of flying is the most unphilosophical. No creature on earth whose weight is as great as that of a man can fly. Strength does not increase equally with size, and this is true of both muscular strength and strength of inert matter. Take two pieces of granite, one weighing one hundred tons and the other half an ounce. Drop them from a high elevation on a rock. The one will be shattered to atoms, and the other will hardly be bruised by the fall. Muscular force is much greater in small animals than large ones, in proportion to their size. A large beam will not bear twice as much weight as one of half the size. So, if it requires a force of one pound to support a small bird in the air, exerted through a medium of wings, a degree of force as much greater as a man is greater than the bird, could by no means lift the man up. But the man can exert no more strength in proportion to his size than the bird can, nor so much; therefore the man cannot fly. These are the results of experiment, and all experiment, united with theory confirms the fact that man was not made to fly.

An Indian Horse.—From the last number of the graphic "Indian Sketches," published in the New York American, we extract the following:

"In the mean time, those of the Indians who had promised horses in the first day of our meeting now brought them up. A young Indian first came forward, and led up a bright, jet black mare—after him followed another, holding in his hand a long buffalo tug, or halter, which restrained the wild motions of a two year old colt; his color was a snowy white, here and there broken with spots of brown. He had been wild in the prairies but a few weeks before. He was a slave, but had never been mounted; his back had never bent to a burden; they led him up in his own native wildness—his tail stood out—his ears were pricked up—his eyes startling--his nostrils expanded--and every hair of his long mane seemed almost erect with an undefinable terror. At one moment he dashed swiftly around at the full stretch of his long tug which secured him--then pausing and shaking his almost bursting eyes upon his captor.---Then raising his head, and casting a long lingering, and almost despairing gaze upon the hills of the prairie, which till then had been his home, he made a desperate leap forward, dragging to the ground the Indian who held the end of his halter; but others rushed to his assistance and held him in. The crowd then attempted to close around him, but he reared upon his hind legs and kept them at bay with the rapid and powerful blows of his fore feet.

"At length a young Indian, who was standing near, threw off his robe; he crept cautiously towards the animal from behind, and then with a sudden leap he bounded upon his back, and seized the tug which was secured in his mouth. Before this, the efforts of the animal had been violent; but when he felt the burden upon his back, when he felt the curbing hand of his rider, he sent up a shrill and almost frantic scream; his form bounded in the air like that of the active wild cat; he reared, he plunged, but in vain—his rider was a master hand, and he retained his seat as unmoved as if he had constituted part of the animal itself; he curbed him in, he lashed him with his heavy whip until he crouched like a dog upon the prairies; his spirit was crushed; and the last spark of freedom was extinguished. Shortly after, one of the hunters came up and tied a pack upon his back; he made no resistance; and they led him off with the rest to finish his days in drudgery and toil.

Asclepias Syriaca.—A new and beautiful material, consisting of the *fibre* of the external cortex of the Asclepias Syriaca, has within a few years been discovered in this town, and the method of manufacturing the same, which together have resulted in an original manufacture. Some specimens of this being recently exhibited at the rooms of the Natural History Society, were imagined by some, and unfortunately it was so published in the Journals of the day, to consist partly of the *wings* or *arms* of the seeds; which misapprehension appears to call for some elucidation of the subject. The specimen articles thus exhibited were all manufactured *exclusively* of the *fibre* of the exterior bark of the stem of the above named plant, which being subjected to various processes, various results are obtained---forming apparently different textures of the manufactured articles. One process produces a substance for a beautiful and substantial paper; another for fancy articles of almost every description; and another for a floss which may compare with the finest silk. The *fibre* is *patented*, but the wings of the seeds enter not into the grant, not being claimed by the patentee as forming any part of the discovery.---*Salem Gaz.*

Corns.—A piece of tobacco, moistened with water and bound upon the corn, acts as an effectual cure. We have tried it and found it so--have recommended it to others who have found the same relief. If you are afflicted bind on the weed and do not ape the Chinese, and we will warrant you free from corns in six months.—*N. H. Spectator.*

Take care of your feet.—The circumstances in which wet feet and cold feet are most apt to cause disease, are where the person remains inactive; and where consequently, there is nothing to counterbalance the unequal flow of blood which then takes place towards the internal parts: for it is well known that a person in ordinary health may walk about or work in the open air with wet feet for hours together without injury, provided he puts on dry stockings and shoes immediately on coming home. It is therefore not the mere state of wetness that causes the evil, but the check to perspiration, and the unequal distribution of blood to which the accompanying coldness gives rise.—*Combe's Physiology applied to health.*

Pumpkin Pies.—Take any given pumpkin, and after dividing it horizontally and ridding it of its seeds, and superfluous contents, place the two parts together on a dish or pan in an oven or stove, with a slow fire, without the addition of water; let it remain therein for two hours, or until sufficiently baked: after which remove it, and the *subject matter* of the pumpkin may be readily separated from the skin, and will be found to be in the precise condition for pies, needing only the sugar and spices, which can be added according to the common rules of taste.

This, for simplicity, will not only save much labor, but exclude the milk and eggs as useless articles; the pies according to the above rule not only being better without them, but may be made with only one-fourth of the trouble attendant on the ordinary mode.—*N. E. Farmer.*

The Number Five.—The Chinese have a great regard for this number. According to them there are five elements—water, fire, metals, wood, earth; five perpetual virtues---goodness, justice, honesty, science, and truth; five tastes---sourness, sweetness, bitterness, acidity, and salt; five colors—azure, yellow, flesh color, white, and black; they say there are five viscera---the liver, the heart, the lungs, the kidneys, and the stomach. They count five organs of the senses---ears, eyes, mouth, nose, and

eyebrows. A Chinese author has written a curious dialogue between these senses. The mouth complains that the nose is not only too near, but above her; the nose in reply defends its position, by stating that but for it the mouth would eat stinking meats. The nose in turn complains of being below the eyes; they reply that but for them men would often break their noses.—*Le Lanterne Magique.*

The Butter Tree.—This tree, which the Landers found abundant in the interior of Africa, yields a very savory and nutritous kind of vegetable marrow. The tree is said to resemble the oak. The nut is enveloped in an agreeable pulpy substance, and the kernel is about as large as our chestnut. This is exposed in the sun to dry; after which it is pounded very fine and boiled; the oily particles float, and when cool they are skimmed off and made into little cakes fit for immediate use.

Dr. Majendie's Observations respecting the Pulse.—Majendie has given a scale of the pulse, which shows that the difference in frequency between that of the infant and the aged is more than double. The scale is, at birth 130 to 140 a minute; at one year, 120 to 130; at two years, 102 to 110; three years, 90 to 100; seven years, 85 to 90; fourteen years 80 to 85; adult age, 75 to 80; first old age, 65 to 75; confirmed old age, 60 to 65.

Astronomy.

Contemplated as one grand whole, astronomy is the most beautiful monument of the human mind, the noblest record of its intelligence. Seduced by the illusions of the senses, and of self-love, man considered himself, for a long time, as the center of the motion of the celestial bodies, and his pride was justly punished by the vain terrors they inspired. The labor of many ages has at length withdrawn the veil which covered the system. Man appears upon a small planet, almost imperceptible in the vast extent of the solar system, itself only an insensible point in the immensity of space. The sublime results to which this discovery has led, may console him for the limited place assigned him in the universe. Let us carefully preserve, and even augment, the number of these sublime discoveries, which form the delight of thinking being. They have rendered important services to navigation and astronomy; but their great benefit has been the having dissipated the alarms occasioned by extraordinary celestial phenomena, and destroyed the errors springing from the ignorance of our true relation with nature; errors so much the more fatal, as social order can only rest on the basis of these relations. *Truth, Justice;* these are its immutable laws. Far from us be the dangereus maxim, that it is sometimes useful to mislead, to enslave, and to deceive mankind, to insure their happiness. Cruel experience has at all times proved, that with impunity these sacred laws can never be infringed.—*Pond's Translation of the Systeme du Monde, par La Place.*

On the Importance of Cultivating Good Fruit.

Farmers in general are too apt to consider fruit as a *mere* luxury, and therefore pay but little attention to its cultivation. But, though fruit is not absolutely *indispensable* to the support of human existence, it is a very *useful* article, and may be ranked among the best gifts of Providence. Mr. Knight, in one of his publications, has observed that, 'The palate which relishes fruit is seldom pleased with strong fermented liquors, and as feeble causes, continually acting, ultimately produce extensive effects, the supplying the public with fruit, at a cheap rate, would have a tendency to operate favorably, both on the physical and moral health of the people.' This view of the subject gives an importance to the pursuits of the orchardist, and elevates him to the rank of a public benefactor.

It is as easy to cultivate the best kinds of fruits as those which are of an inferior quality, and the former are no doubt more wholesome, as well as more palatable, than the latter. Besides, by introducing fruits of different kinds into our markets and furnishing them in plenty for the domestic boards, we render their consumption more common, and cause the most pleasant and most wholsome articles of aliment to be those of most general use. The philanthropist, therefore, can in no way better make known his good will to the human species than by using his best efforts to cause the fruit to be cheap, plentiful, and of an excellent quality.—*New England Farmer.*

Cashmere Shawls.—It is computed that upwards of 50,000 persons are now engaged in Scotland, in manufacturing shawls, from the hair of the Cashmere and Thibet goat. The yarn for this purpose is principally obtained from France.

Death of Mr. Grimke.—Thomas S. Grimke of South Carolina, died of cholera at Gwynne's farm in Ohio, on Saturday the 11th ult. His remains were conveyed to Columbus, where he was buried on the day of his death by moonlight. The N. Y. Commercial Advertiser says "the death of Mr. Grimke will be deeply felt, and widely deplored by the literary and religious communities of our country. He was a fine scholar, of accomplished manners and address and of sincere and unaffected piety. The influence of his name was great at the South, and was becoming so throughout the Union—and it was an influence of the most healthy and of the soundest character—identified, as his exertions were, with the great moral, religious and literary institutions of the country."

PRICES CURRENT.

ARTICLES.	PER	Nov. 1. ROCHESTER.	Oct. 27. NEW-YORK.
Ashes—Pot....	100lbs.	$3,40.....	$4,12 a 0,00
—— Pearl..	.....	3,60.....	4,75 a 4,80
Beeswax, yellow	lb.	0,18 a 0,20	21 a 22
Candles, mould	.....	0,10 a 0,11	13. a 14
—— dipped.	.....	0,09 a 0,10	11 a 12
Cloverseed.....	.....	6½.....	7 .a. 7½
Flax, American.	.....	.....	7½..a..08
Flax seed, clean	tierce	9,00a10,00	12,50a13,00
Flour, Western.	barrel	4,75.....	5,31a 5,50
Grain, Wheat..	bushel	0,00a0,81½	1,05 a1,07
—— Rye....	.....	0,62.....	70.a..75
—— Oats...	.....	0,28.a..30	40.a..41
—— Corn...	.....	0,50.....	72.a..75
—— Barley..	.....	0,53.a..00	65.a..67
Hemp, Americ'n	ton	.....	100 a 120
Hops, 1st sort .	lb.	.....	17.a..20
Plaster Paris...	ton	6,50 a 0,00	2,00 a2,12
Beef, Mess....	barrel	8,00 a10,00	8,75 a 9,50
—— Prime....	.....	6,00 a 8,00	6,25 a 6,50
Pork, Mess....	.....	14,00a15,00	13,50a14,50
—— Prime....	.....	11,00	9,00a9,50
—— in the hog.	100lbs.	4,00.....	....
Tallow.....	.....	6,00 a 7,00	6,50 a 7,00
Hay.....	ton	8,00 a 10,00	9,75a11,20
Apples.....	bushel	50.a.100	.....

To Farmers.

The Western Agriculturist and Practical Farmer's Guide, prepared under the superintendence of the Hamilton County Aricultural Society, for sale by HOYT & PORTER.
oct 18

Moubray's Treatise on Poultry, &c.,

With abridgements and additions by the Editor of the New England Farmer, price 50 cts. For sale by HOYT PORTER & Co.

Monroe Horticultural Garden & Nursery.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

Orders by mail or otherwise will be promptly attended to, and packages delivered in Rochester, or at the Canal one mile from the Nursery.

☞ *Orders for Mr. Rowe's Nursery received* by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, Monroe co. N. Y. Sept. 13, 1834.

Linnæan Garden and Nursery,

Flushing, near New-York.

Wm. PRINCE & SONS have just published their *New Catalogues, with greatly reduced prices.* Application therefor must be made *direct to them,* per mail. Every department of the establishment is in the most perfect condition, in regard to the accuracy and superiority of its productions, and strangers are solicited to visit it and judge for themselves. The Fruit Trees are of large size, and in the most vigorous state, suitable for orchards where prompt bearing is desired. Among these are the fine new Flemish Pears, and the German varieties of Apples, Cherries and Plums, which are so well adapted to a northern climate. Ornamentul Trees and flowering shrubs can be furnished of the largest size, worth treble the price of small ones, as several years are thus gained in embellishment. The collections of Green-House Plants and hardy Flowering Plants are particularly rich and interesting; the assortment of Roses and Double Dahlias comprise all the new splendid varieties, and each collection occupies above an acre of ground. Splendid Dahlias will now be supplied at $3, $4,50, and $6 *per dozen, each root a distinct named* variety selected by us. Of Bulbous Flower Roots, the stock is so greatly increased that they will be sold at very low rates.

Chinese Mulberry, or Morus multicaulis, at $4,50 per dozen, or $25 per 100. Isabella, Catawba, Alexander and Winne Grapes, at $20 to $25 per 100. Fine Red Raspberries, $6 per 100; superior Lancashire Gooseberries, assorted, at $3 per dozen, and $20 per 100. When so desired, selections will be made of the most hardy kinds of Fruit and Ornamental Trees and Plants suited to a northern climate. When a large number of trees &c. is ordered, a discount will be made, and a credit allowed if so desired. Nurseries and other venders will be supplied at a liberal discount and a convenient credit.

The assortment of Garden, Field and Flower Seeds is exceedingly extensive, and forms a complete concentration of the choicest varieties known in Europe or this country, all of which have been raised under our own inspection, or grown expressly for us by our European correspondents. Their accuracy and excellence is expressly guaranteed, and *we ask no payment when the seeds do not prove exactly as represented.*

Among the Field Seeds are the following: Perennial Rye Grass, New Italian do., Lucerne, Dutch White Clover, Early Angus Oats, English Potatoe Oats, weighing 44 lbs. per bushel, Orchard Grass, English Oat Grass, Trifolium incarnatum, or Early Crimson Clover, Burnet, &c. Also, 50 bushels Potatoe Onions. Venders of seeds will be supplied at the most moderate rates possible, and at a credit to comport with their convenience. Orders sent *direct per mail* will have immediate dispatch, and every invoice from us has our *printed heading and signature.* oct 11-4t

Cash for Wood.

Cash will be paid for a quantity of good Wood by HOYT & PORTER.
sept 26

From Blackwood's Magazine.

A Few Years.

Oh! a few years! how the words come,
Like frost across the heart!
We need not weep, we need not smile,
A few years, a little while,
And it will all depart.
And we shall be with those who lie
Where there is neither smile nor sigh.

Yet—"a few years"—is this the whole
Of chillness in the name?
That, glad or wretched, a few years,
With their tumultuous hopes and fears,
And 'twill be all the same—
Our names, our generation gone,
Our day of life, and life's dream done?

Ah! this were nothing;—fewer still
Will do to bury all
That made life pleasant once, and threw
Over its stream the sunny hue,
That it shall scarce recall.
There is a gloomier grave than death,
For hearts where love is as life's breath.

Ay, pain sleeps now, but a few years,
And how all, all may change!
How some whose hearts were like our own,
So woven with ours, so like in tone,
By then may have grown strange;
Or keep but that tame cutting show
Of love that freezes fervor's flow!

Such things have been; oh! a few years,
They teach us more of earth;
And of what all its sweetest things,
Its kindly ties, its hopes, young springs,
Its dearest smiles are worth,
Than aught its sage ones ever told,
Before our own fond breast grew cold.

But—worse and saddest—a few years,
And happy is the heart
That believes itself the same—
Its now calm pulse, so dead, so tame,—
To be the one whose lightest start
Was bliss, even though it wrung hot tears
To the cold rest of latter years.

The storms and buds together gone,
The sunshine, and the rain—
Our hopes, our cares, our tears grown few,
We love not as we used to do,
We never can again!
And thus much for a few short years—
Can the words breathe of much that cheers?

Yet something we must love while life
Is warm within the breast;
Oh! would that earth had not even yet,
Enough, too much, whereon to set
Its tenderness suppress!
Would this world had indeed no more
On which affections's depth to pour!

For then how easy it would be,
In contriteness of soul,
Weary and sick to bring to one,
To the Unchangeable alone,
Devotedly the whole:
Then a few years at rest forgiven,
Himself would dry all tears in Heaven!

Domestic Economy.

PUDDINGS.

Baked Indian Pudding.—Indian pudding is good baked. Scald a quart of milk, (skimmed milk will do,) and stir in seven table spoonfuls of sifted Indian meal, a tea-spoonful of salt, a tea-cupful of molasses, and a great spoonful of ginger, or sifted cinnamon. Baked three or four hours. If you want whey, you must be sure and pour in a little cold milk, after it is all mixed.

Boiled Indian Pudding.—Indian pudding should be boiled four or five hours. Sifted Indian meal and warm milk should be stirred together pretty stiff. A little salt, and two or three great spoonfuls of molasses, added; a spoonful of ginger, if you like that spice. Boil it in a tight covered pan, or a very thick cloth; if the water gets in, it will ruin it. Leave plenty of room; for Indian swells very much. The milk with which you mix it should be merely warm; if it be scalding, the pudding will break to pieces. Some people chop sweet suet fine, and warm in the milk; others warm thin slices of sweet apple to be stirred into the pudding. Water will answer instead of milk.

Flour or Batter Pudding.—Common flour pudding, or batter pudding, is easily made. Those who live in the country can beat up five or six eggs with a quart of milk, and a little salt, with flour enough to make it just thick enough to pour without difficulty. Those who live in the city, and are obliged to buy eggs, can do with three eggs to a quart, and more flour in proportion. Boil about three quarters of an hour.

Bread Pudding.—A nice pudding may be made of bits of bread. They should be crumbled and soaked in milk over night. In the morning, beat up three eggs with it, add a little salt, tie it up in a bag, or in a pan that will exclude every drop of water, and boil it little more than an hour. No pudding should be put into the pot, till the water boils. Bread prepared in the same way makes good plum puddings. Milk enough to make it quite soft; four eggs; a little cinnamon; a spoonful of rose-water, or lemon-brandy, if you have it; a tea-cupful of molasses, or sugar to your taste, if you prefer it; a few dry, clean raisins, sprinkled in, and stirred up thoroughly, is all that is necessary. It should bake or boil two hours.

Rennet Pudding.—If your husband brings home company when you are unprepared, rennet pudding may be had at five minutes' notice; provided you keep a piece of calf's rennet ready prepared soaking in a bottle of wine. One glass of this wine to a quart of milk will make a sort of cold custard. Sweetened with white sugar, and spiced with nutmeg, it is very good. It should be eaten immediately; in a few hours it begins to curdle.

Custard Puddings.—Custard puddings sufficiently good for common use can be made with five eggs to a quart of milk, sweetened with brown sugar, and spiced with cinnamon, or nutmeg, and very little salt. It is well to boil your milk, and set it away till it gets cold. Boiling milk enriches it so much, that boiled skim-milk is about as good as new milk. A little cinnamon, or lemon peel, or peach leaves, if you do not dislike the taste, boiled in the milk, and afterwards strained from it, give a pleasant flavor. Bake fifteen or twenty minutes.

Rice Pudding.—If you want a common rice pudding to retain its flavor, do not soak it, or put it in to boil when the water is cold. Wash it, tie it in a bag, leave plenty of room for it to swell, throw it in when the water boils, and let it boil about an hour and a half. The same sauce answers for all these kinds of puddings. If you have rice left cold, break it up in a little warm milk, pour custard over it, and bake it as long as you should custard. It makes very good puddings and pies.

Bird's Nest Pudding.—If you wish to make what is called "bird's nest puddings," prepare your custard,—take eight or ten pleasant apples, pare them, and dig out the core, but leave them whole, set them in a pudding dish, pour your custard over them, and bake them about thirty minutes.—*Frugal Housewife.*

Enjoyment is not found so much in luxurious as in simple dishes. Fried apples are better and more wholesome than expensive preserves.

Suet keeps good all the year round, if chopped and packed down in a stone jar, covered with molasses.

Cider cake is very good, to be baked in small loaves. One pound and a half of flour, half a pound of sugar, a quarter of a pound of butter, half a pint of cider, one teaspoonful of pearlash; spice to your taste. Bake till it turns easily in the pans, I should think about half an hour.

To make Rice Bread.—Boil a pint of rice soft; add a pint of leaven; then three quarts of flour; put it to rise in a tin or earthen vessel until it has risen sufficiently; divide it into three parts; then bake it as other bread, and you will have three large loaves.

Baked beans are a very simple dish, yet few cook them well. They should be put in cold water, and hung over the fire, the night before they are baked. In the morning, they should be put in a colander, and rinsed two or three times; then again placed in a kettle, with the pork you intend to bake, covered with water, and kept scalding hot for an hour or more. A pound of pork is quite enough for a quart of beans, and this is a large dinner for a common family. The rind of pork should be slashed.

A pailful of ley, with a piece of copperas half as big as a hen's egg boiled in it, will color a fine nankin color, which will never wash out. This is very useful for the linings of bed-quilts, comforters, &c.

Never say you Cannot.—There never was an instance of a man of shrinking disposition having accomplished great things. Drones or stupid beings, who will not, or possibly cannot exert themselves, may be got along with; but a person who is forever tinkering about something, and will be constantly delving at that and the other, with desperate industry; and yet flinches when he arrives at some difficulty he cannot see through, such an one we desire no acquaintance with; give us the man who, having made up his mind to arrive at a given point, dauntlessly pushes onward through every obstacle. Resolution is the talisman that forces the flood gate of wealth, and unravels the mystery of getting rich.

Rochester Seed Store and Horticultural Repository.

REYNOLDS & BATEHAM, are just opening at their store, No. 60, Buffalo-st. (Eagle Block) a large assortment of seeds of English, French, German and American growth. Their assortment is nearly complete, and additions will constantly be made as fast as importations of the new crop arrive. Their collection embraces a variety of new and valuable kinds, well worthy the attention of farmers, such as Hopeton and Early Angus Oats, English Potatoe do., (weighing 44 lbs. to the bushel,) Winter Tares or Vetches. Spring do., Orchard Grass, Pacey's Perennial Rye Grass, Lucern, Trefoil or Yellow Clover, Trifolium incarnatum, or Flesh Colored Clover, Sainfoin, Millet, Mangold Wurtzel, &c. Also, Top or Tree Onion, and a few Potatoe do. A Green House and Horticultural Garden are in progress, and all orders for Seeds, Trees, Shrubs, Grape Vines, Green House Plants, &c. will be faithfully executed.

Rochester, Oct. 25, 1834. oct 25

Peach Trees.

A FEW hundred *Peach* and *Nectarine* trees, consisting of select varieties, propagated from trees whose *genuineness has been proved by examinations of the fruit*; and a few plants of hardy American grapes—for sale by J. J. THOMAS,
Greatfield, near Aurora, Cayuga co.

ELECTION NOTICE.

Sheriff's Office, Rochester, August 14, 1834.

A GENERAL Election is to be held in the county of Monroe on the 3d, 4th, and 5th days of November next, at which will be chosen the officers mentioned in the notice from the Secratary of State, of which a copy is annexed.

E. M. PARSONS, Sheriff
of the county of Monroe.

State of New-York, Secretary's Office,
Albany, Aug. 1, 1834.

Sir—I hereby give notice that at the next General Election, which is to be held on the 3d, 4th and 5th days of November next, a Governor and Lieutenant Governor are to be elected.

Notice is also given that two Senators are to be chosen in the Eighth Senate District, one in place of Trumbull Cary, whose term of service will expire on the last day of December next, and the other in the place of John Birdsall, resigned, whose term of service will expire on the last day of December, 1835.

JOHN A. DIX,
Secretary of State.

To the Sheriff of the county of Monroe.

N. B.—The Inspectors of Election in the several towns in your county will give notice of the election of a Representative to Congress from the Twenty-eighth Congressional District; also for the choice of Members of Assembly, and for filling any vacancies in County offices that may exist.

☞ All public newspapers in this county will publish the above, and send their bills to the Sheriff of the county. aug 16